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REMARKS

In the Final Office Action of March 29, 2004, claims 4-9, 12-15, and 22-26 are pending. Claims 9 and 22 are allowed. Claims 4, 7-9, 12, and 22-26 are independent claims from which all other claims depend therefrom.

Claims 4-6, 12, 14-15, and 23-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Byon (USPN 5,847,472) in view of Okada (2002/0091474).

Claims 4 and 12 are similar and are therefore discussed together. Claim 4 recites a restraints control module (RCM) for a vehicle that has one or more impact sensors. The RCM has a memory device, a controller, and a comparator. The memory device stores a deployment time of a deployment event. The controller determines when to deploy a restraint, stores the deployment time, and stores in the memory device a fault time corresponding to the deployment time. The fault time is indicative of a fault within the RCM, the impact sensors, or a combination thereof. The comparator compares the deployment time with a fault time and determines whether the fault time corresponds with the deployment time. Claim 12 also recites an RCM having the limitations of claim 4. The RCM of claim 12 further includes the limitation of an indicator. The controller of claim 12 stores a deployment start time and duration, a fault time, and signals the indicator when the fault time corresponds to the deployment start time and duration.

The RCMs of claims 4 and 12 are capable of determining when a fault time of the RCM or of an impact sensor corresponds with a deployment time, a deployment start time, and a deployment duration. This information assists in determining whether an impact sensor, a restraint, or an RCM needs to be serviced or replaced. As such, the RCMs of claims 4 and 12 aid in preventing the use of improperly functioning impact sensors, restraints, and RCMs.

It has been admitted in the Office Actions that Byon does not teach a comparator for comparing a deployment time with a fault time and determining whether the fault time corresponds with the deployment time. However, the

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Office Actions have stated that Okada teaches tracking down the relationship between the operation state of the airbag and the failure of the operation control section of the airbag, in so doing the Office Actions have referred to paragraph [0006]. The Final Office Action further states that Okada in determining the operation state of an airbag discloses a deployment time and in determining the failure of the airbag discloses a fault time. Applicants, respectfully, submit that although Okada may determine the failure of or the fault time of the operation control section of an airbag, Okada does not teach or suggest the storing of a fault time that is indicative of a fault within the RCM, the impact sensors, or a combination thereof.

Okada determines the relationship between the state of an airbag and the failure of the operation control section of the airbag. In general, an airbag deployment system typically includes two operational sections, a first section that determines when to trigger or deploy an airbag and a second section that controls the actual operational deployment of the airbag. The latter or second section may be referred to as the "operation control section of the air bag", as stated in Okada. Okada determines the fault time with the second section or the operation control section of an airbag deployment system, whereas the RCMs of claims 4 and 12 store the fault times associated with the first section or with the trigger control section of an airbag deployment system.

There is a clear and distinct difference between the circuitry and control devices used to trigger an airbag and the devices used to control the actual deployment of and/or the manner in which an airbag is deployed. For example, the memories of claims 4 and 12 store fault times associated with the impact sensors and the RCMs, rather than the fault times associated with an airbag igniter or airbag igniter controller. This is also inferred in the controller limitations of the RCMs, which state that the controllers determine when to deploy a restraint.

Thus, Byon and Okada alone or in combination do not teach or suggest each and every element recited in claims 4 and 12 and the prima facie case of

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obviousness has not been met, as required under 35 U.S.C. 103(a) and as stated in MPEP 2143, therefore claims 4 and 12 are novel, nonobvious, and are in a condition for allowance. Since the rejections have been overcome for claims 4 and 12 and since claims 5-6 and 13-15 depend from claims 4 and 12, respectively, claims 5-6 and 13-15 are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

In regards to claims 15, 23, and 26, the Office Actions state that neither of the prior art references teach a memory device that is uneraseable, unresettable, and unoverwritable. Applicants agree. The Office Actions state that it would have been obvious to substitute a storage device for another storage device. Applicants, respectfully, traverse.

As stated in previous Responses, Byon teaches away from the memory devices of claims 4 and 12. Referring to MPEP 2141.02, the prior art must be considered in its entirety, including disclosures that teach away from the claims. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Byon discloses a memory that is preferably erasable and that can be reset or cleared. Okada discloses in paragraph [0038] the use of a memory, such as EEPROM. EEPROM stands for Electrically Erasable Programmable Read Only Memory. Nowhere in Byon or Okada is there any suggestion to the contrary. Thus, in view of Byon and Okada it would not have been obvious to utilize the memory device of claims 15, 23, and 26. Also, note that the Examiner has not provided any arguments to the contrary.

Thus, it is not inherent or obvious in view of Byon and Okada to use a memory that prevents the data from being reset, erased, and overwritten. Therefore, claims 15, 23, and 26 are novel, nonobvious, and are in a condition for allowance at least with regards to the nonobvious limitation of a memory device that is uneraseable, unresettable, and unoverwritable.

In regards to claim 24, the Office Actions state that Byon teaches the storing of a deployment end time and refers to col. 6, lines 64-67. As stated in previous responses, in col. 6, lines 64-67 and in col. 7, line 1, Byon stores a

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transmission time of an airbag control signal and an expansion time of an airbag. Byon discloses the time when an airbag is enabled and the time when the airbag is actually expanded or deployed. The storage of an airbag enablement time and an airbag deployment time is not the same as the storage of a deployment end time. The storage of a deployment end time is not disclosed in the stated lines or anywhere else in Byon, and the Examiner has not provided any arguments to the contrary. Thus, claim 24 is also novel, nonobvious, and is in a condition for allowance.

Claim 25 includes the limitation of a controller storing the operating time of a RCM. This limitation is not taught or suggested by either Byon or Okada alone or in combination. Although Byon discloses a clock generating device generating a clock signal, the generation of a clock signal is clearly not the same as the storage of an RCM operating time. Nowhere in either Byon or Okada is the operating time of a controller let alone an RCM taught or suggested. The Examiner again has not provided any arguments to the contrary. Thus, claim 25 is also novel, nonobvious, and is in a condition for allowance.

Claims 7-8, and 13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Byon in view of Otsu (USPN 6,231,075).

Claims 7-8 and 13 are similar and are therefore discussed together. Claim 7 recites an RCM that includes an indicator that is electrically coupled to a controller. The indicator continuously indicates that the RCM has been on a vehicle that has been involved in a collision, until such time when the RCM is serviced or replaced. Claim 8 recites an RCM similar to that of claim 7, but further recites an indicator that permanently indicates that the RCM has been on a vehicle that has been involved in a collision and does not include the limitation of indicating until such time when the RCM is serviced or replaced. Claim 13 also recites an RCM such as that recited in claim 8, but further includes the indication of when a fault time corresponds with a deployment start time.

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The Office Actions state that Byon does not teach an indicator electrically coupled to a controller and the indicator continuously indicating that the RCM has been on a vehicle that has been involved in a collision until such time when the RCM is serviced or replaced. Applicants agree. The Office Actions, however, state that Otsu teaches a controller continuously monitoring the waveform of the collision signal provided by the collision sensor after the squib has been initiated and that to continuously monitor the waveform until the controller is replaced or serviced would have been obvious to one of ordinary skill in the art. Applicants traverse.

Applicants have submitted without any arguments to the contrary that continuously monitoring a waveform of a collision signal is not the same as continuously indicating that an RCM has been on a vehicle that has been involved in a collision. Otsu monitors the collision sensor waveform to determine whether a collision has occurred, whereas the RCM of claims 7-8 and 13 indicate that an RCM has been on a vehicle that has been involved in a collision such that the RCM or some other safety related device may be serviced or replaced. Monitoring a collision signal is clearly different than indicating the status of an RCM. Also, although it may have been obvious to continuously monitor a collision signal waveform until the corresponding controller is replaced or serviced, it would not have been obvious to continuously indicate that an RCM has been on a vehicle that has been involved in a collision until such time when the RCM is serviced or replaced, especially since Otsu does not even provide such indication. Thus, neither Byon nor Otsu alone or in combination teach or suggest each and every element of claims 7-8 and 13 and the prima facie case of obviousness has not been met, therefore, claims 7-8 and 13 are novel, nonobvious, and are also in a condition for allowance.

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In light of the amendments and remarks, Applicants submit that all objections and rejections are now overcome. The Applicants have added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, she is respectfully requested to call the undersigned attorney.

Respectfully submitted,

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